STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

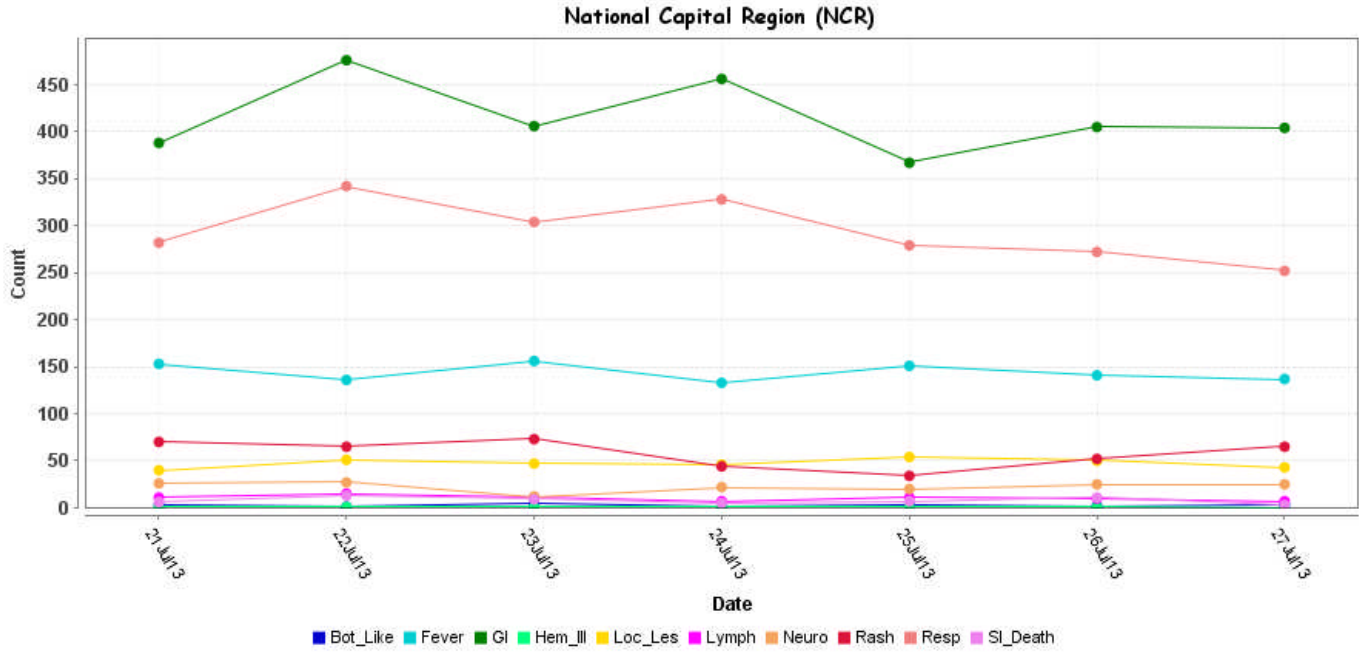
August 2, 2013

Public Health & Emergency Preparedness Bulletin: # 2013:30
Reporting for the week ending 07/27/13 (MMWR Week #30)

CURRENT HOMELAND SECURITY THREAT LEVELS

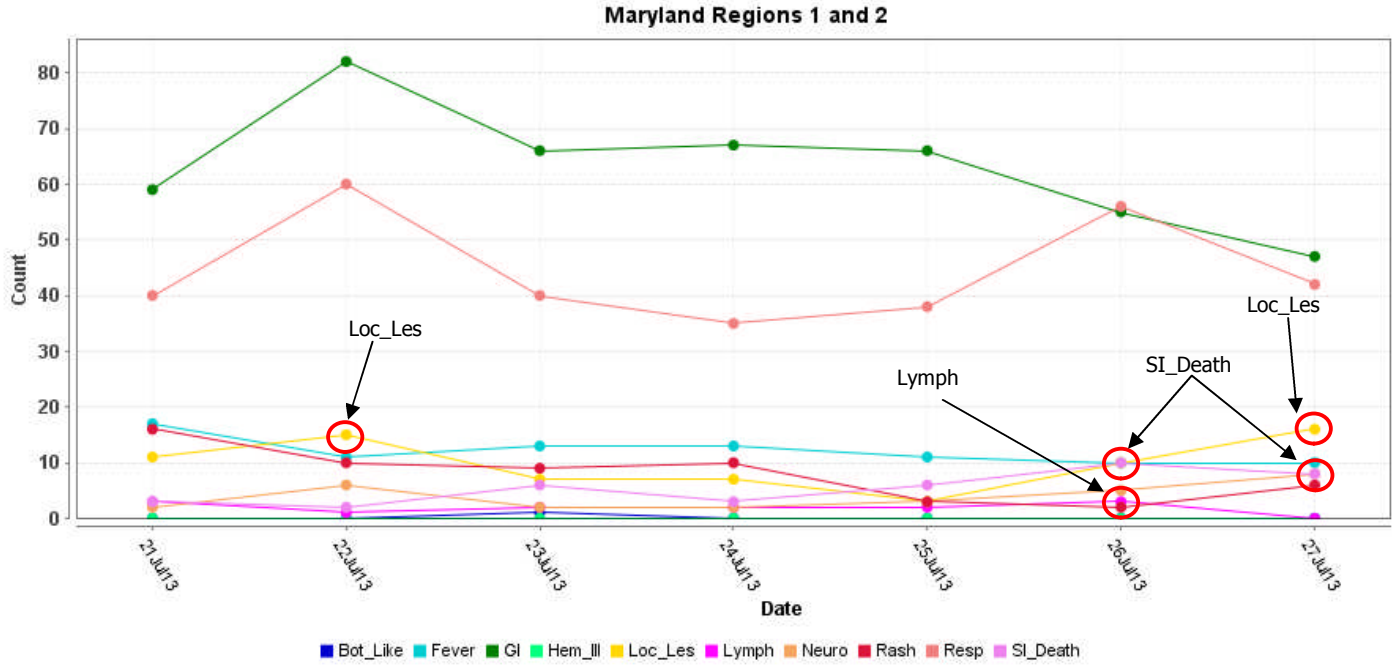
National: **No Active Alerts**
Maryland: **Level Four (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

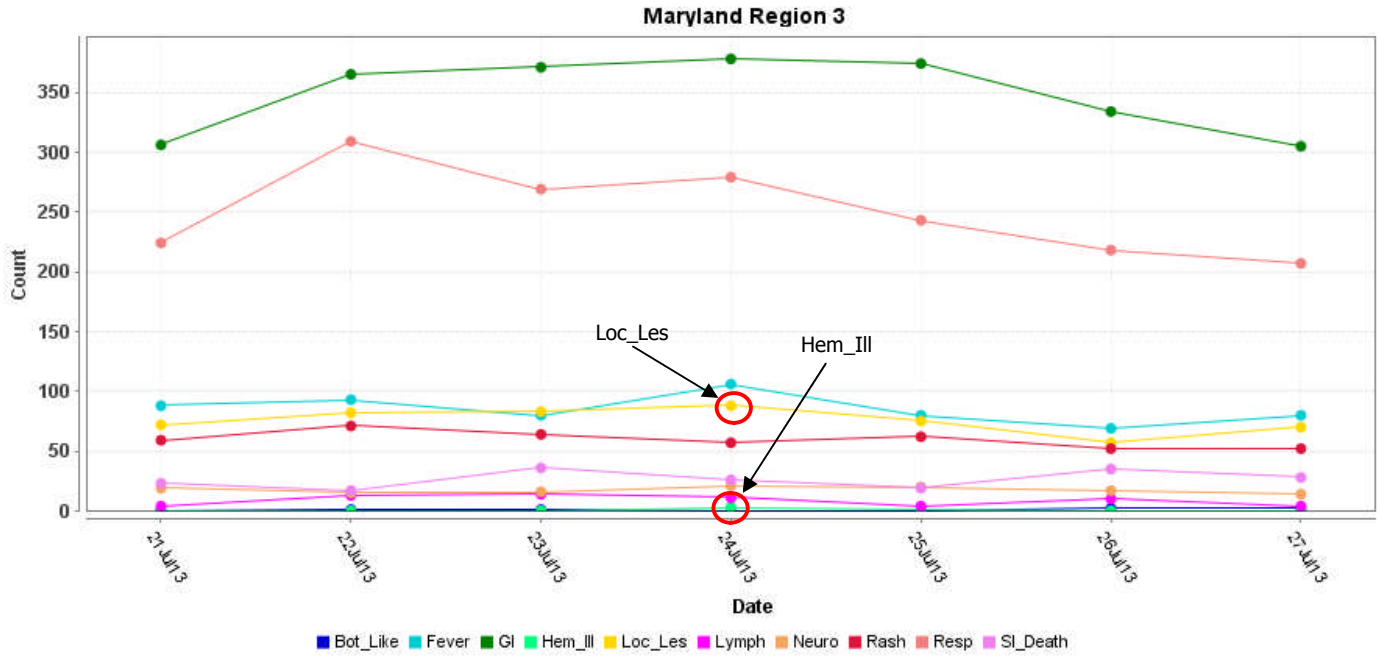


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

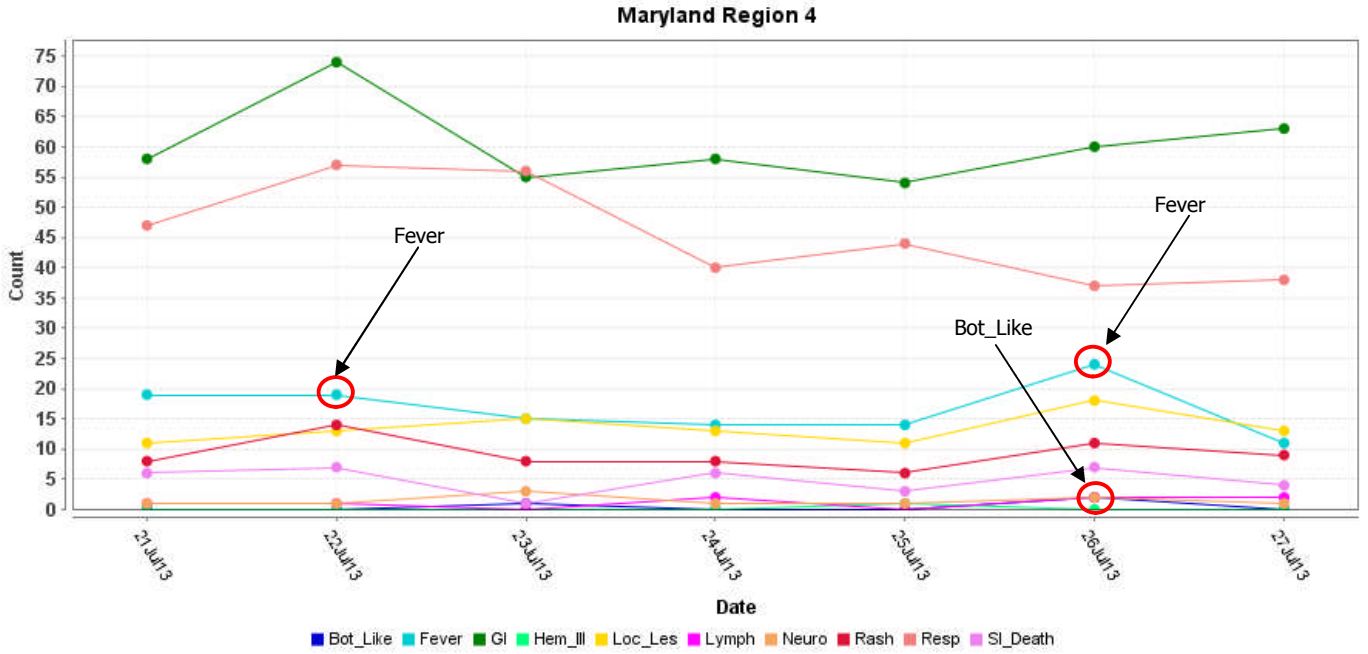
MARYLAND ESSENCE:



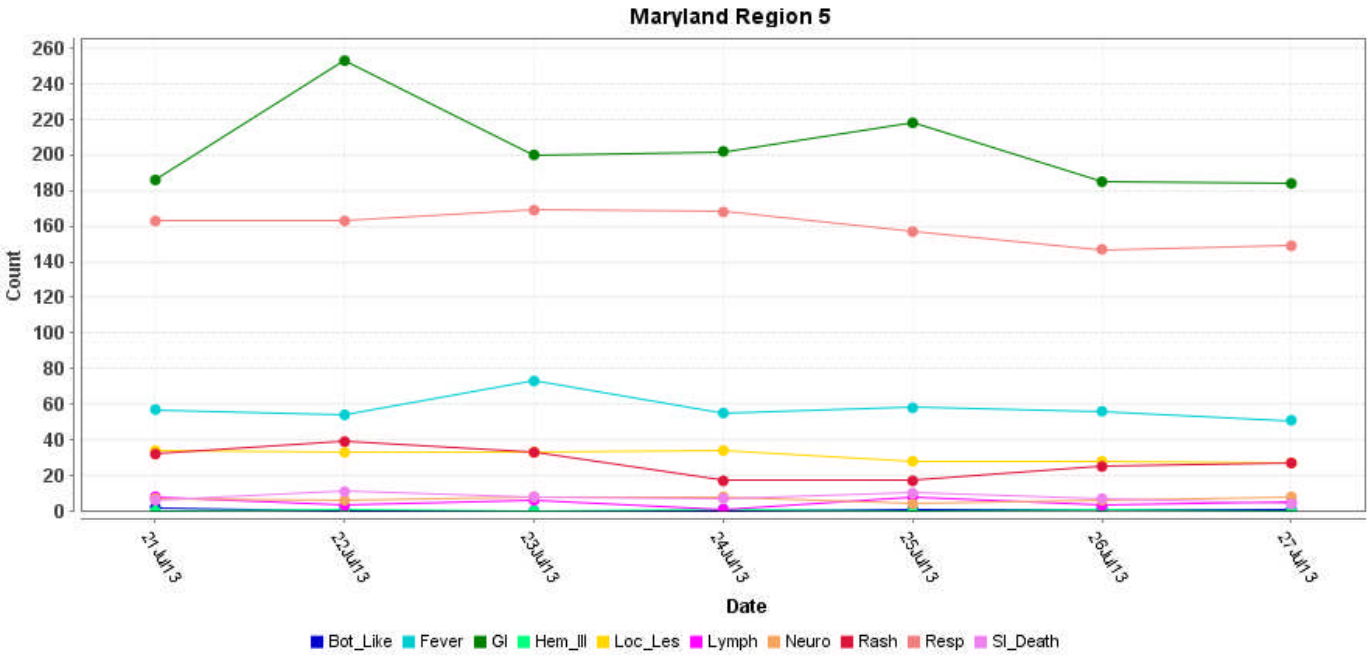
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



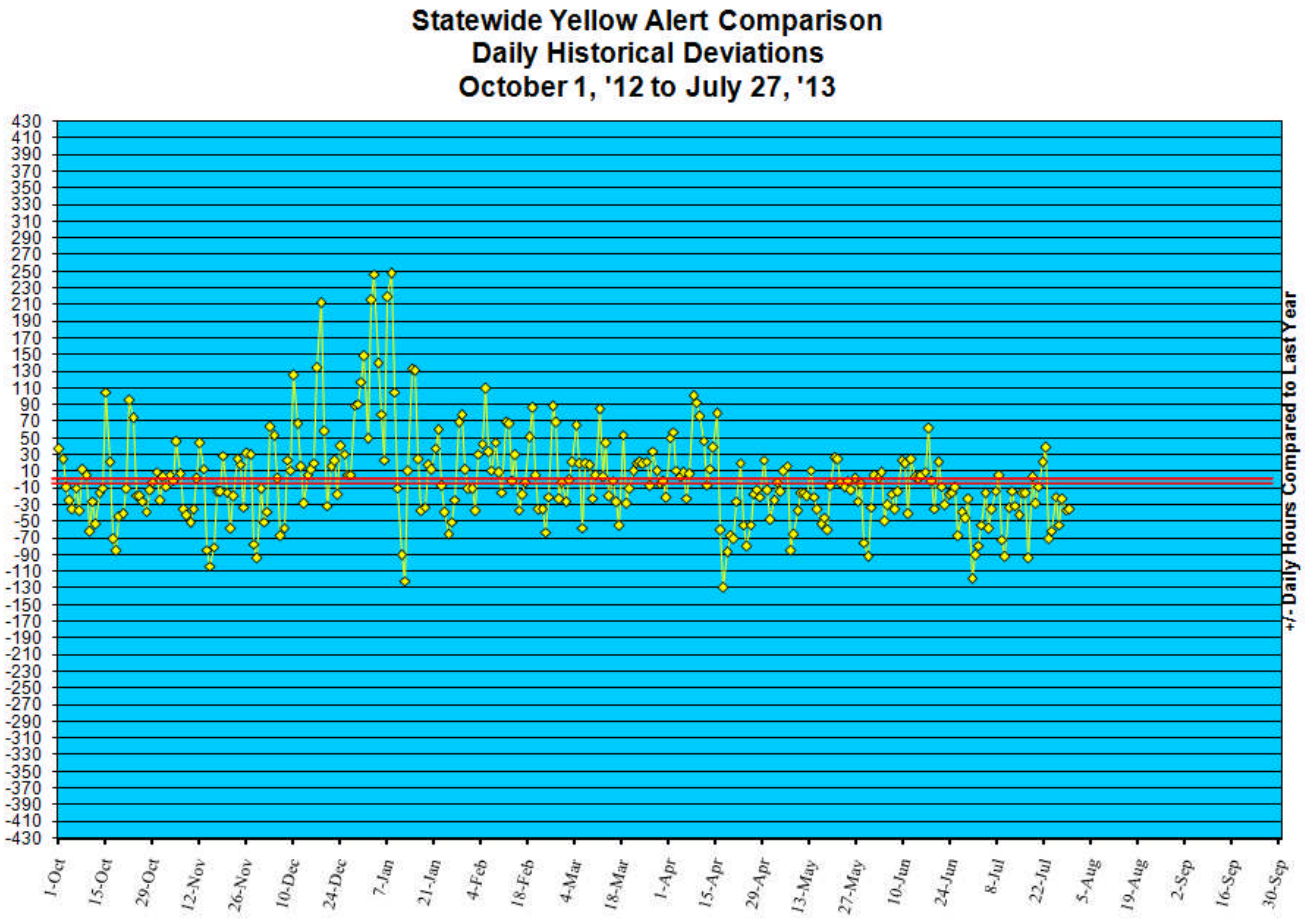
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/11.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in June 2013 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (July 21 - July 27, 2013):	11	0
Prior week (July 14 - July 20, 2013):	8	0
Week#30, 2012 (July 23 – July 29, 2012):	10	0

2 outbreaks were reported to DHMH during MMWR Week 30 (July 21 – July 27, 2013)

1 Foodborne Outbreak
1 outbreak of GASTROENTERITIS/FOODBORNE associated with a Restaurant

1 Rash Illness Outbreak
1 outbreak of SCABIES in an Institution

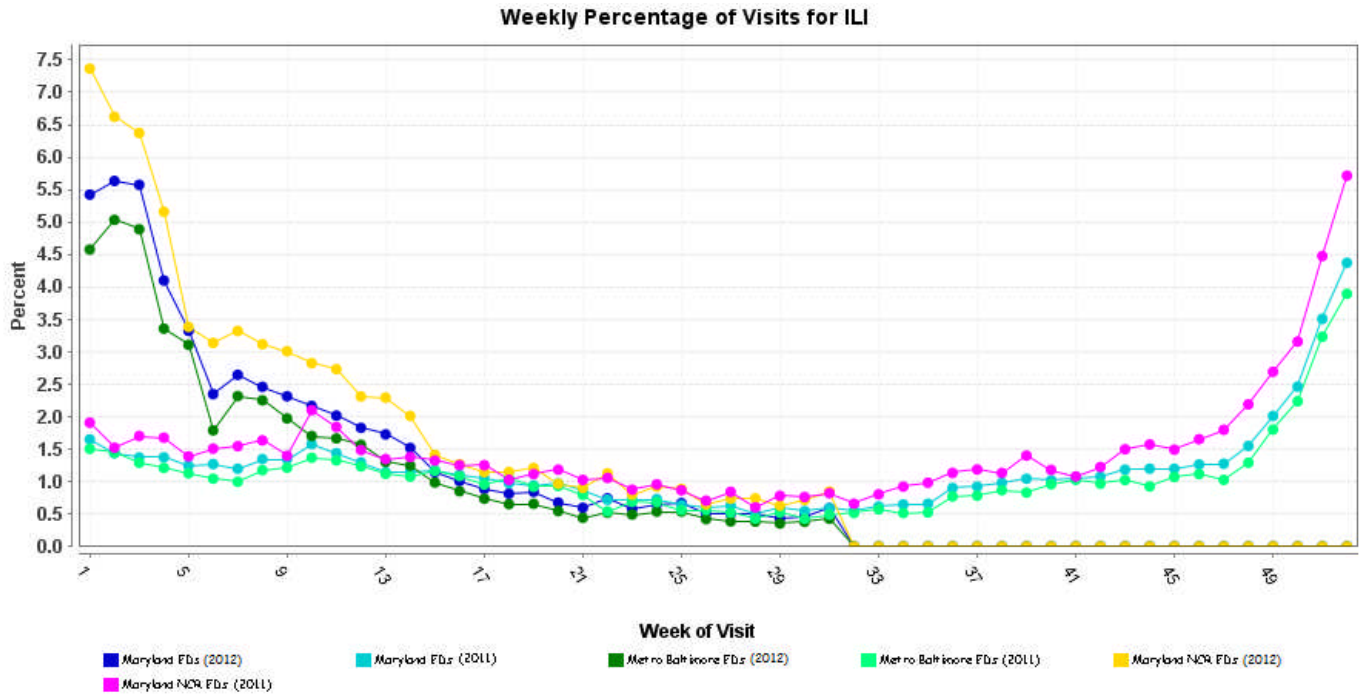
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May.

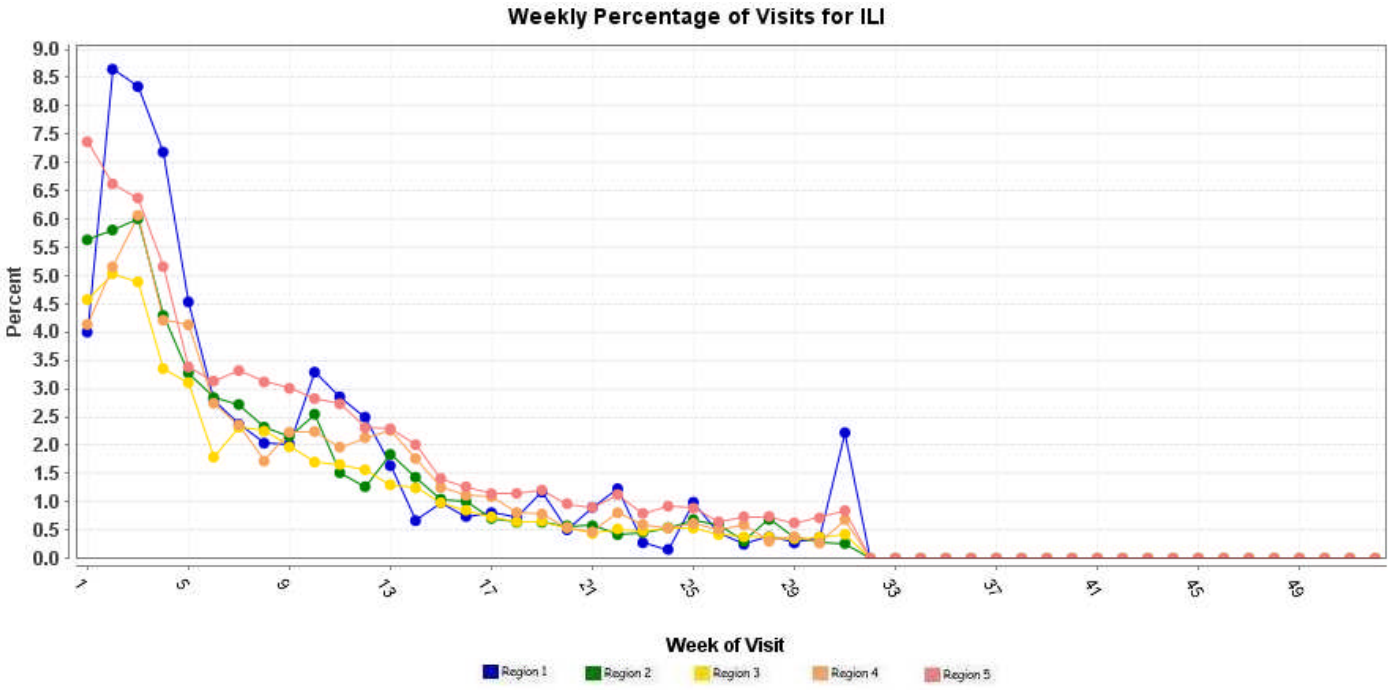
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



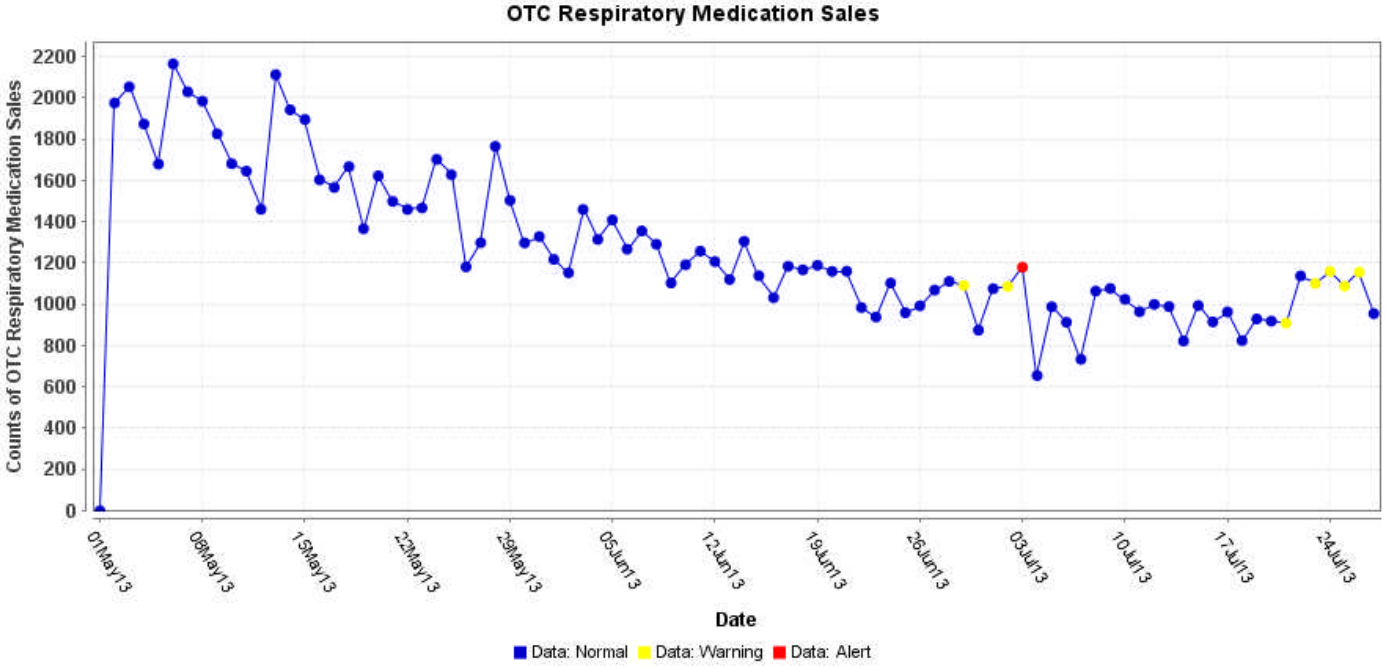
* Includes 2012 and 2013 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2013 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of July 5, 2013, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 633, of which 377 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 60%.

NATIONAL DISEASE REPORTS*

LEGIONELLOSIS (OHIO): 26 July 2013, Two more people have died from legionnaires' disease at a Reynoldsburg retirement community, bringing the total deaths to 4 and those sickened to 35. It is the largest legionnaires' [disease] outbreak in Franklin County in recent memory, county health commissioner Susan Tilgner said yesterday [25 Jul 2013]. State health officials could not say where the outbreak ranks in Ohio history, but a 2011 outbreak that sickened 11 people treated at a Dayton hospital was billed at the time as the largest in the state since 1994. Wesley Ridge Retirement Community superheated its water system yesterday [25 Jul 2013] for the 2nd time on the recommendation of the federal Centers for Disease Control and Prevention [CDC]. Legionnaires' [disease], a disease caused by legionella bacteria in water systems, is spread through infected mist or water droplets and is not contagious. Preliminary results from CDC testing showed the bacteria in more than one location in the facility at 2225 Taylor Park Dr., including an air-conditioning cooling tower, but health officials have yet to determine precisely how people have been sickened. "We're getting closer to figuring out what might be happening," Tilgner said. More information from interviews with people who've been ill is coming together, and the county is expecting more results soon from additional CDC tests, she said. Tilgner said she's hopeful that the source of the infection has been contained and that illnesses and deaths will stop as more time elapses since Wesley Ridge 1st took precautions against the bacteria. "We are still seeing people getting ill who were getting exposed before we knew about the problem," she said. The disease usually affects people who have a weakened immune system. Symptoms usually develop within 10 days of exposure to the bacteria and can include fever, chills, coughing, muscle aches, headaches, fatigue, and loss of appetite. About 225 people live in the community, and 10 or so others visit every day for adult daycare, said Margaret Carmany, the chief executive officer of Wesley Ridge, which is owned by Methodist ElderCare Services. Overall, 28 people have been hospitalized because of the disease, but no one has been taken to a hospital since Saturday [20 Jul 2013], Carmany said. Those affected are employees, residents, and visitors and range in age from 63 to 99 years. Residents are drinking only bottled water and are using showers that were fitted with CDC-approved filtering shower heads on Monday [22 Jul 2013], Carmany said. Residents were previously going to nearby buildings off-site to shower. Health officials said it hasn't made sense to move people out of Wesley Ridge. It could be especially hard on those who are already medically fragile, said Ohio Department of Health spokeswoman Tessie Pollock. Tilgner said the residents are "better off being there with those precautions in place than to try to move them. They could get exposed somewhere else. It's out there. We see legionellosis cases all year long, and this is the time of year we tend to see more." The disease has not interrupted food service or activities. The kitchen is using bottled water to cook, and the in-house hair salon for residents is using bottled water. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

E. COLI EHEC (NEW YORK): 22 July 2013, Two cases of *Escherichia coli* infection have been confirmed in Broome County [New York State], and 3 more are now under investigation by the health department, which is trying to determine whether the new cases are linked to those previously connected to Nathaniel Cole Park. "We have seen 3 additional cases in Broome County. Some have nothing to do with Cole Park, and some have something to do with Cole Park," said public health director Claudia Edwards. The health department is still waiting to hear whether those cases are linked to Cole Park and whether they are the same strain, which has been found to be *E. coli* O26, Edwards said. That's the strain that's been hitting the Southern Tier (of upper New York counties) and 8 other states, including Pennsylvania, Georgia, California, West Virginia, Missouri, and Michigan. "It could be contaminated hamburger meat; it could be contaminated lettuce; it could be poor hand washing. Once a person is infected, there's a high chance of infecting other family members," Edwards said. "It could also be as simple as a child in a diaper entering the water and contaminating it." Within the next few weeks, the health department will know more about the other 3 unconfirmed cases and whether they are officially related to Cole Park, Edwards said. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

LEGIONELLOSIS (WISCONSIN): 21 July 2013, The legionnaires' disease outbreak [in the Milwaukee area] is a mystery but may be tied to summer's late start. The disease has seriously sickened 31 people in the Milwaukee area since 1 Jun 2013. Public health officials have not determined the environmental source of the [outbreak of] legionnaires' disease in south eastern Wisconsin. It's possible they never will find the source if the legionella bacteria that caused the disease have already dissipated. One theory points to cooling towers on top of large buildings prepped and waiting for hot weather that arrived unusually late, in mid-June 2013. Five patients might have been within a few-miles radius at about the same time in June 2013, family members said they were told. Public health officials haven't disclosed the geographic location because it's an active investigation. One patient, who lives in Waukesha but works in St Francis, is a smoker with newly diagnosed emphysema. He's one of 4 people in Waukesha County diagnosed with legionnaires' since 1 Jun 2013. He had driven himself to Waukesha Memorial Hospital on 5 Jul 2013 because he couldn't breathe. He spent nearly 2 weeks in a medically induced coma and on a ventilator while being treated with antibiotics. His kidneys failed, requiring daily dialysis. Now in a critical but stable condition, he is breathing with the help of a tracheotomy, according to family members. Towers that use water to cool buildings are suspect because they have a seasonal maintenance schedule that assumes hot weather before mid-June, said Paul Biedrzycki, director of disease control and environmental health for the Milwaukee Health Department. The towers are filled with water in late April or early May so they're ready to cool buildings as soon as it gets hot outside, Biedrzycki said. Because the water sat in rooftop cooling towers from early spring until sometime in June 2013, it could have stagnated and become dirty, allowing legionella bacteria to colonize, Biedrzycki said. When air conditioning units finally were flipped on, the cooling towers could have spewed the bacteria into the air. The bacteria could travel a few miles beyond the buildings on water droplets. Chlorine that's automatically fed through

cooling towers once air conditioning is turned on for the 1st time may not have reached appropriate levels to kill the legionella bacteria, Biedrzycki said. Someone randomly passing within a few miles of contaminated cooling towers could have inhaled the airborne bacteria. Those with heart or lung conditions would be most vulnerable. Biedrzycki said there isn't a single source common to all 14 City of Milwaukee cases, or even to a cluster of a half-dozen cases that appear to be related. "In absence of a smoking gun after a week of looking, I wonder whether there was a seasonality factor," he said, referring to the cooling towers and timing of hot weather. Four of the 14 Milwaukee people sickened by the bacteria remain hospitalized but are expected to recover, Biedrzycki said. Some of the 17 cases in surrounding counties may be linked to exposure in Milwaukee, too. The last report of legionnaires' in the city was last Monday [15 Jul 2013]. It can take up to 14 days from exposure to the bacteria until symptoms begin, though the Milwaukee cases have had an incubation period of 4-5 days on average, Biedrzycki said. Three years ago, a legionnaires' outbreak that sickened 8 people was linked to a decorative waterfall inside a Cudahy hospital. The waterfall was contaminated with high levels of the heat-loving legionella bacteria. Those sickened in the current Milwaukee-area outbreak weren't in a common building, Biedrzycki said.

Water samples have been taken from outdoor decorative fountains and pools with water-spraying devices, anything other than building cooling towers that could aerosolize legionella bacteria. Tests of those samples and of swabs taken from surfaces of devices that spray warm water so far have come back negative for legionella, Biedrzycki said. A total of 37 cases of legionnaires' disease have been confirmed statewide since 1 Jun 2013, including 31 cases in contiguous counties in south eastern Wisconsin: 20 in Milwaukee County, 4 in Waukesha County, 3 in Racine County, 3 in Walworth County and one in Kenosha County, according to epidemiologist Tom Haupt of the state Department of Health Services. "At least 4 or 5 cases had onset of symptoms on the 4th of July [2013], with an incubation period up to 14 days prior," Haupt said. Officials have been investigating whether those individuals shared a common travel history in or around Milwaukee in the same time frame. "We may never know which cases are related," Haupt said. "When you can't pinpoint it to one location, it makes it extremely difficult." Legionnaires' cases are confirmed every year in Wisconsin. Last year [2012], there were 93 cases statewide. In 2011, there were 69 cases, and in 2010, 63 cases, according to Haupt. So far this year [2013], the state has seen 53 cases, including the 37 since 1 Jun 2013. The recent cases in Milwaukee make up one of the larger clusters detected in the state in a while, Haupt said. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

CYCLOSPORIASIS (USA): 22 July 2013, On [28 Jun 2013], CDC was notified of 2 laboratory-confirmed cases of cyclospora infection in Iowa residents who had become ill in June [2013] and did not have a history of international travel during the 14 days before the onset of illness. Since that date, CDC has been collaborating with public health officials in multiple states and the US Food and Drug Administration (FDA) to investigate an outbreak of cyclosporiasis. As of [18 Jul 2013], CDC has been notified of more than 200 cases of cyclospora infection in residents of multiple states, including Iowa, Nebraska, Texas, and Wisconsin. Illinois has also notified CDC of one case that may have been acquired out of state. Most of the illness onset dates have ranged from mid-June through early July [2013]. At least 8 people reportedly have been hospitalized. No food items have been implicated to date, but public health authorities are pursuing all leads. Previous outbreak investigations have implicated various types of fresh produce. It is not yet clear whether the cases from all of the states are part of the same outbreak. No common events (such as social gatherings) have been identified among the case patients. Additional cases are currently under investigation and will be included on this page [at the source URL above] as states confirm them. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

BOTULISM (WASHINGTON): 21 July 2013, Home canning is regaining popularity as part of the local food movement. If done right, families can enjoy home grown fruits, vegetables and even meat all through the winter. But if done wrong, it can be devastating, if not deadly. A man from the state of Washington recently learned that lesson the hard way. On the Friday before Mother's Day [10 May 2013], he was looking forward to spending the weekend with his wife at their home in the Seattle area. During the week, he lives alone in Olympia [Thurston County] where he works. But he woke that morning with the strangest affliction: double vision. "There were 2 of everything and I had an awful time just shaving and getting ready for work," he said. He suspected the double vision was related to some laser eye surgery he recently had. He managed to make it into work, but soon went home. That evening, he experienced more strange symptoms. "My legs felt rubbery," he said. The next morning, he felt even worse. He was bumping into walls. He called his wife. "I told her, 'You know, I'm going to stop by the ER on the way up just so somebody can tell me I'm okay and I'm not having a stroke,'" he said. At the hospital, that's exactly what they thought he was having. He heard "stroke in progress" called over the intercom. Suddenly he was surrounded by nurses and doctors. Test results started coming back. There was no evidence of stroke. "I didn't know enough to bring up the fact that I had eaten canned meat," he said. Canned meat. You see, the night before the man woke up with double vision, he had eaten some elk meat from a hunting trip. He canned it himself about a week earlier. "Borrowed a pressure cooker, used an old family recipe for canning," he said. His mother had canned everything when he was a kid. He wanted to recapture a bit of his childhood. But things started going wrong from the start. "I had way too much meat to deal with," he said. The pressure cooker was too small. He had already browned the meat in a cast iron pan. So he decided to shortcut the process. Once the jars sealed airtight he would take them out of the pressure cooker and start a new batch. The next day, he heard a pop in the pantry -- "which I remember as a child was the signal for you've lost the seal," he said. He found the jar with the popped seal, put it in the fridge and ate it the next day. He says it was delicious. The following week he heard another lid pop. Just as he had before, He found the jar and stuck it in the fridge. And a few days later he ate it for supper. "This time, it didn't work out," he said. The man had an upset stomach in the night, but he didn't connect it to having eaten the meat. He says growing up, he didn't know anyone who got food poisoning from home canned foods. At the hospital, once doctors ruled out a stroke, the man was sent home. But he was back in the hospital a few hours later. Now he was having difficulty swallowing. The next morning, Mother's Day, his daughter drove to Olympia to see her dad. "His voice was very slurred and his eyelids were droopy, but he was sitting up in bed and he was communicative," she said. As the day progressed though, his condition got markedly worse. "By now, my eyes were closed. My strength -- it was just amazing how quickly that went," he said. His breathing was getting shallow. The daughter was frustrated with the lack of answers and scared. She called a doctor she knew, a neurosurgeon. He ran through a short checklist of things to rule out. That list included a disease 1st identified in the 18th century: botulism. She looked it up online. "It just made the hair on the back of my neck stand up because it was every single symptom just laid out exactly what my dad was experiencing," she said. Botulism is a paralyzing illness caused by what the CDC calls the most potent toxin known to science. It's rare; there were only 20 foodborne cases nationwide in 2011, and just one in Washington state in 2012. Improperly home canned foods are a leading culprit, especially those low in acid like green beans and, yes, meats. The daughter called her mom who had just left the hospital. "And I said, 'Mom, turn around. You got to go back and tell them to look into this,'" she said. The daughter was relieved, but also terrified that it was too late. Her father could hardly move now. He was having more and more difficulty breathing. The hospital had parked a ventilator outside his room. The doctors didn't even wait to confirm botulism. They ordered a dose of anti-toxin from the CDC. Now the medical mystery was solved. But how did the patient get botulism? Remember he stopped cooking the jars of elk meat when he heard the seals lock in place. Washington State University food safety expert Zena Edwards says that was his nearly fatal mistake. Edwards says what happened to the man reaffirms 2 cardinal rules of home canning: "plan before you can" and "when it doubt, throw it out." After receiving the anti-toxin, he was transferred to Swedish Hospital in Seattle for rehab. It took just days for the botulism to paralyze him. The recovery would be painfully slow. "My eyes were the 1st thing to come back. I still walk with difficulty and use a cane. I have no taste with the exception of chocolate, so I buy chocolate Ensure, chocolate mints; and [the] night before last, I found where they sell chocolate wine so I had some of that, too," he said. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS*

BOTULISM (ITALY): 22 July 2013, Dozens of people have been hospitalized in Italy after eating pesto sauce contaminated with botulism bacteria. More than 50 people, who had eaten jarred pesto from a local producer, sought help at local hospitals after suffering symptoms including vomiting, diarrhea, and high fevers. Tests on the pesto showed the presence of the bacterium *Clostridium botulinum*, which produces the botulinum toxin which when ingested causes a life-threatening kind of food poisoning. Health and food safety workers were inundated with calls through the weekend requesting information on the scare. The victims are almost all from the area around Genoa, the birthplace of the famous pasta sauce, the Italian newspaper La Republica reported. Six of those admitted, including 2 children, were kept in overnight for observation as further tests are carried out. The local producer responsible for the outbreak has been growing the area's renowned basil for almost 2 centuries, but only recently started selling pre-prepared jars of the sauce. Bruzzone and Ferrari alerted health authorities on Fri 19 Jul 2013, pulling the jars from supermarket shelves. The company said: "We made the discovery during our own tests and analysis of our fresh product, non-pasteurized product, which contains no preservatives." Local newspaper Il Secolo XIX reported on Sat 29 Jul 2013 Stefano Bruzzone, one of the company's owners, as saying: "In one sample, we found a level of substances which forced us to recall a whole batch of the product." Tests on the pesto showed the presence of the bacterium *Clostridium botulinum* , which produces the botulinum toxin. He told the paper they have done everything they should do to take care of their customers, spending 25 000 euros [USD 33 000] a year on laboratory analyses to avoid such episodes. He added that the tests were still in progress. The name pesto comes from "pestello", the Italian word for the pestle, which was once used to grind basil, garlic and cheese into the well-loved sauce. The earliest known record of the sauce is from an 1865 cookbook "Genovese Recipes", in which it is defined as "beaten basil and garlic which is used to season pasta." (Botulism is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

LEGIONELLOSIS (CANADA): 23 July 2013, Toronto [Ontario province] Public Health says it has seen more cases of legionnaires' disease than it would expect at this point in the summer and it is advising physicians to be on the lookout for additional cases. Dr Rita Shahin, one of the city's associate medical officers of health, said on Tuesday [23 Jul 2013] that officials have become aware of 16 cases in a 6 week period. That's well above the 3 or 4 cases that officials would usually expect to see. "We normally begin to see a spike in legionnaires' disease starting in August and we wanted to let physicians -- particularly emergency room doctors -- know about this increase and to be aware, so that they test people appropriately that are coming in with pneumonia," Shahin told CBC News in an interview. The Toronto Public Health website says that individuals become infected by breathing in air that is contaminated with droplets containing a bacteria known as *Legionella pneumophila*. People who fall ill from the bacteria will display symptoms similar to pneumonia. Those could include fever, chills, a cough, as well as muscle and headaches. In the current spike of cases that Toronto officials are observing this summer, there is no common link between them. Dr Michael Gardam says that there is no consensus yet on why there is an increasing number of legionnaires' cases in North America. "There's a lot of theories going around that perhaps this is related to [the fact that] we've had wetter summers, we've had global climate change and that certainly bacteria do take advantage of things like that and we may be seeing changes," Gardam told CBC News on Tuesday [23 Jul 2013]. In 2005, an outbreak of legionnaires' disease at a Toronto nursing home led to the deaths of more than 20 people. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

MERS-COV (EASTERN MEDITERRANEAN): 24 July 2013, Middle East respiratory syndrome coronavirus (MERS-CoV) has made people in as far away as the UK and North Africa deathly ill. Nevertheless, as the majority of infections and deaths have occurred in Saudi Arabia, many believed that this was the origin of the SARS-like virus. With a more than 50 per cent mortality rate, fears are high that the virus could spread globally during the annual Hajj pilgrimage to Saudi Arabia occurring in the next few months. Reseachers have tried to figure out where the virus originated from to understand how to prevent its transmission and prevent any variant from taking hold. Scientists from the University of Bonn in Germany and researchers in South Africa have found evidence that a virus that is genetically quite close to the MERS-CoV is in the feces of bats. These South African bats harbor a virus that is more genetically similar to the MERS-CoV than any other virus tested. The findings, which were published in the journal Emerging Infectious Diseases, may provide important clues into the true origin of this new virus. The researchers tested 62 South African bats from 13 species for coronaviruses to determine if their feces contained viruses closely related to MERS-CoV. This was possible because the MERS-CoV virus had its genome sequenced early on in research of the disease. Although the related virus was seen in only one bat, the finding is still a compelling one. It is unknown how the virus was originally transmitted to humans, either through bats directly or through an intermediary like livestock, but evidence has shown that the virus can spread from person to person when they are in close quarters. (Emerging Pathogens are listed in Category C on the CDC List of Critical Biological Agents) *Non-suspect case

DIARRHEAL SHELLFISH POISONING (ENGLAND): 25 July 2013, Shellfish harvesting has been halted throughout Shetland and mussels have been withdrawn from market after 70 people reported symptoms of food poisoning in England. The Food Standards Agency (FSA) said "unusually high" levels of naturally-occurring toxins, which can cause diarrhetic shellfish poisoning, have been detected in nearby waters. These cases, most of which happened between 13 and 15 Jul 2013, have been linked to the eating of mussels from Shetland. It was after the harvest of these mussels that the FSA recorded the high levels of toxins during their weekly monitoring program. According to the FSA, these toxins are produced by marine phytoplankton, and levels are typically higher in summer, but harvesting waters are closed if the legal limit is exceeded. A total of 11 harvesting areas in waters to the north and west of the islands have been shut by the local authority, and businesses operating in the remaining 9 areas have decided to voluntarily stop commercial harvesting, said Maggie Sandison, executive manager of environmental health at Shetland Islands Council. "This year [2013], we've seen an unprecedented amount of toxin, and the levels have increased from one week to another higher than we've ever seen before," she said. "It's been an unusual year, so obviously, we want to see what's happened this year [2013] compared with previous years and see whether the existing approaches and risk assessments that the businesses have are still appropriate based on the information about what's happened this year." Shetland Mussels is the company that supplied the affected shellfish. The business has told the FSA that all of their customers have been contacted, and all mussels from that batch have been consumed or disposed of. Ruth Henderson, chief executive of Seafood Shetland, said the trade association was satisfied Shetland Mussels followed the correct procedures and that a full investigation was under way. She also expressed regret that some of the affected mussels had been consumed. She said: "Diarrhetic shellfish poisoning is caused by naturally-occurring algal blooms. The recent warmer temperatures have led to an unprecedented level and increase of algal blooms. Because shellfish is particularly delicate and susceptible to tainting, growers are always very cautious about maintaining the quality of the product. As a result, a voluntary withdrawal of all Shetland mussels from the market has been undertaken until the current high levels of toxins in the water have subsided. Customers can be assured that Shetland mussel farmers will take every precaution necessary to protect the excellent reputation that their product has attained in the marketplace." The FSA said mussels were supplied to a number of restaurants, some through a number of intermediary suppliers, and customers reported being unwell after eating at: Belgo in Covent Garden, Holborn, Clapham and Bromley; Zero Degrees in Blackheath and Reading; The Phoenix near Hook, Hampshire; Boulevard Brasserie in Covent Garden; and Pig's Ears in Richmond. These premises were said to have acted appropriately by notifying the relevant authorities when the cases of illness were identified. Jacqui McElhiney from the FSA said: "This year [2013], we have detected very high levels of toxins, and there's been an unusually high number of closures of

harvesting areas. We're not sure why this has occurred, but it's likely to have been due to a combination of factors such as the warmer conditions this summer [2013]." (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

*National and International Disease Reports are retrieved from http://www.promedmail.org/.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

Zachary Faigen, MSPH
Biosurveillance Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
300 W. Preston Street, Suite 202
Baltimore, MD 21201
Office: 410-767-6745
Fax: 410-333-5000
Email: Zachary.Faigen@maryland.gov

Anikah H. Salim, MPH, CPH
Biosurveillance Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
300 W. Preston Street, Suite 202
Baltimore, MD 21201
Office: 410-767-2074
Fax: 410-333-5000
Email: Anikah.Salim@maryland.gov

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumoccocal meningitis, viral encephailitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephailitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable